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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/919,423 | 07/31/2001 | Gary L. Thunquest | 10016887-1 | 4201 |

7590 09/06/2005

HEWLETT-PACKARD COMPANY
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EXAMINER

MURPHY, RHONDA L

ART UNIT PAPER NUMBER

2667

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,423

Applicant(s)

THUNQUEST ET AL.

Examiner

Rhonda Murphy

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on June 17, 2005.
Accordingly, claims 1-8 are currently pending in this application.

Claim Objections

1. Claims 1, 5 and 7 are objected to because of the following informalities:

The word "the" between "wherein" and "copying" shall be deleted from claim 1, line 9; claim 5, line 9; and claim 7, line 10.

In claim 1, line 10, "network address" shall be replaced with "network addresses".
Appropriate correction is required.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 5 and 7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7 and 13 of copending Application No. 09/919108. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 5 and 7 of the instant application merely broadens the scope of claims 1, 7 and 13 of the co-pending application 09/919108 by eliminating the elements and their functions of the claims. It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before, *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd.App.1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 - 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boivie et al. (US 6,785,275) in view of Kashyap (US 6,438,128).

Regarding claim 1, Boivie teaches a header section, wherein the header section includes a list of network addresses for the selected multiple remote destinations (col. 3, lines 33-34; col. 4, lines 51-55; placing all of the multicast destination IP addresses in the options field); and a data section, wherein the data section comprises computer readable data to be transmitted to the selected multiple remote destinations (It is inherent for a data packet to contain a data section and it is well known that computers are capable of reading data), wherein the switches and routers receive a first data packet and copy the first data packet into one or more second data packets (receiving and copying a data packet in multicast routing techniques are well known in the art; col. 2, lines 32-38).

Boivie fails to explicitly disclose copying the first data packet including zeroing out each address in the list of network addresses for the selected multiple remote destinations that is not directly accessible beyond the network switch or router receiving a data packet.

However, Kashyap teaches zeroing out addresses in a set of multicast addresses.

In view of this, it would have been obvious to one skilled in the art to modify Boivie's system by zeroing out addresses in the list of addresses that are not accessible beyond the switch or router receiving the packet, in order to avoid wasting resources by transmitting data that is unreachable beyond the switch or router.

Regarding claim 2, Boivie teaches the data packets comprising internetworking protocol (IP) data packets (col. 3, lines 34-36).

Regarding claim 3, Boivie teaches the header section including a specially formatted IP options field (col. 3, lines 29-48; the option field contains destination IP addresses).

Regarding claim 4, Boivie teaches the IP options field comprising: a code byte signifying that the data packet is a DAMP data packet (col. 3, lines 42-43; the code indicates a small group multicast. Since the code byte indicates the type of data packet, it would have been obvious to one having ordinary skill in the art to associate the DAMP data packet type with the small group multicast type described by Boivie); a length byte specifying the length of the IP options field (col. 3, lines 43-44; the length indicates the total number of bytes for multicast destinations, which are located in the IP options field); and a number of multi-byte IP addresses, one for each of the selected multiple remote destinations (col. 3, lines 32-34; each of the multicast destination IP addresses represent a remote destination and addresses are capable of being multi-byte addresses).

3. Claims 5 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boivie et al. (US 6,785,275) and Kashyap (US 6,438,128) in view of Maruyama (US 6,757,294).

Regarding claims 5 and 7, Boivie teaches the same limitations as described above in the rejection of claims 1-4. Furthermore, Boivie teaches a DAMP sending client (source node) embedding in a header section of a first data packet a formatted IP options field, wherein the IP options field includes identification of the data packet as a DAMP data packet (col. 5, lines 46-49; refer to the statements in claim 4); setting a source IP

address field to the IP address of the DAMP sending client (col. 3, lines 38-39; the source IP address represents the source of the multicast packet).

Setting the destination IP address field to the non-zero IP address of one of the selected multiple remote destinations was not explicitly described by Boivie. However, Maruyama teaches setting a destination IP address as a primary destination with one of the multicast destinations (k) and eliminating the selected destination from the list of multicast destinations. Hence, the destination IP address field is set to a non-zero IP address – an address that is within the list of remote destinations to receive the transmitted packet, and the address being subsequently removed from the list (col. 5, lines 47-55).

In view of this, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to combine Boivie and Maruyama's method of setting the destination IP address field to a non-zero IP address, for the purpose of transmitting data to the appropriate remote destination, among the listed remote destination addresses.

Regarding claims 6 and 8, Boivie further teaches the same limitations as described above in the rejection of claim 4.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

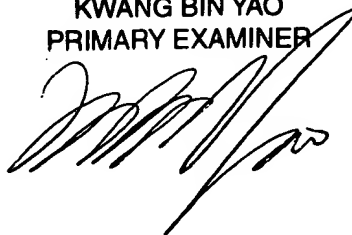
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-31799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy
Examiner
Art Unit 2667

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KWANG BIN YAO
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to be 'Kwang Bin Yao', written over the printed name and title.